CIVIL-TECH CONSULTANTS AND ENGINEERS

Building & Highway Material Testing Laboratory
An ISO 9001:2008 Certified Company
NABL - Accredited Laboratory as per ISO / IEC-17025 : 2005

JAS-ANZ BSCIC ISO 9001 REGISTERED

Job No.: CTCE/BBMP/KRIDL/W.No.13/WMM/Gradation/2017-18 26.12.2017

TEST REPORT ON GRADATION OF WET MIX MACADAM

* Customer	:	**Asst. Executive Engineer,** Shettyhalli Sub Division, BBMP, Bangalore.
* Agency	:	**Technical Manager (West),** KRIDL, Bangalore.
* Name of Work	:	Improvements to Roads and asphalting at pipeline road to Maheshwaramma temple and other roads in Mallasandra Ward No.13 in Shettyhalli Sub Division , BBMP, Bangalore.
* Reference	:	BBMP/EE/DD/WO/145/2017-18 Dated: 21.12.2017
Sample ID	:	Wet Mix Macadam
Technical Reference	:	IS 2386 (part-1)1963 (RA-2016)
Date of Testing	:	26.12.2017

Oven Dry Wt (gm): **5000**

Is Sieve Size in mm	Weight Retained (gm)	Cumulative Weight Retained (gm)	Cumulative % of Retained	Cumulative % of Passing	Spec.Limits As per Morth Table 400-1
53	0	0	0	100	100
45	150	150	3.0	97.0	95-100
22.4	1565	1715	34.30	65.70	60-80
11.2	1065	2780	55.60	44.40	40-60
4.75	615	3395	67.90	32.10	25-40
2.36	490	3885	77.70	22.30	15-30
0.600	535	4420	88.40	11.60	8-22
0.075	385	4805	96.10	3.90	0-8

*Information is furnished by the Customer/Representative.

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Note:

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⇒The results indicated above are based on the tests carried out on the samples received in the laboratory.

⇒Any Query regarding the report must be reported within 30 days from the date of testing.

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Job No.: CTCE/BBMP/KRIDL/W.No.13/WMM/AIV/2017-18 26.12.2017

TEST REPORT ON IMPACT VALUE OF AGGREGATE

* Customer	:	**Asst. Executive Engineer,** Shettyhalli Sub Division, BBMP, Bangalore.
* Agency	:	**Technical Manager (West),** KRIDL, Bangalore.
* Name of Work	:	Improvements to Roads and asphalting at pipeline road to Maheshwaramma temple and other roads in Mallasandra Ward No.13 in Shettyhalli Sub Division , BBMP, Bangalore.
* Reference	:	BBMP/EE/DD/WO/145/2017-18 Dated: 21.12.2017
* Sample ID	:	Wet Mix Macadam
Technical Reference	:	IS: 2386 Part IV
Date of Testing	:	26.12.2017

Sl No.	Details	Trial No.		Average
		1	2	
1	Total weight of aggregate sample filling the cylindrical measure = W_1 g	383	385	
2	Weight of agregate passing 2.36 mm sieve after the test = W_2 g	79	82	
3	Weight of aggregate retained 2.36 mm sieve after the test = W_3 g	304	303	
4	Aggregate Impact value = percent fines 100* (W2/W1)%	20.63	21.30	20.96

*Information is furnished by the Customer/Representative.

Comments:

→ Maximum allowable Aggregate Impact value for Wet Mix Macadam is 30%

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Job No.: CTCE/BBMP/KRIDL/W.No.13/WMM/Shape.T/2017-18

26.12.2017

TEST REPORT ON FLAKINESS INDEX & ELONGATION INDEX OF COARSE AGGREGATES

* Customer	:	**Asst. Executive Engineer,** Shettyhalli Sub Division, BBMP, Bangalore.
* Agency	:	**Technical Manager (West),** KRIDL, Bangalore.
* Name of Work	:	Improvements to Roads and asphalting at pipeline road to Maheshwaramma temple and other roads in Mallasandra Ward No.13 in Shettyhalli Sub Division , BBMP, Bangalore.
* Reference	:	BBMP/EE/DD/WO/145/2017-18 Dated: 21.12.2017
* Sample ID	:	Wet Mix Macadam
Technical Reference	:	IS 2386(Part 1) 1963 (RA 2016)
Date of Testing	:	26.12.2017

Sl.No.	Description	Result
1	Flakiness Index	12.13%
2	Elongation Index	13.62%
3	Combined Flakiness & Elongation Index	25.75%

*Information is furnished by the Customer/Representative.

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Comments:

→ Maximum allowable Flakiness & Elongation Index for Wet Mix Macadam is 30%

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T-2377

Job No.: CTCE/BBMP/KRIDL/W.No.13/CSR-01/540/QB(BM)/2017-18 11.01.2018

TEST REPORT ON DETERMINATION OF BITUMEN CHARACTERISTICS

* Customer	:	**Asst. Executive Engineer,** Shettyhalli Sub Division, BBMP, Bangalore.
* Agency	:	**Technical Manager (West),** KRIDL, Bangalore.
* Name of work	:	Improvements to Roads and asphalting at pipeline road to Maheshwaramma temple and other roads in Mallasandra Ward No.13 in Shettyhalli Sub Division, BBMP, Bangalore.
* Reference	:	BBMP/EE/DD/WO/145/2017-18 Dated: 21.12.2017
* Sample ID	:	Bitumen
Source/ Location	:	Hot Mix Plant, Bangalore.
Sample Received on	:	09.01.2018
Period of Testing	:	09.01.2018 to 11.01.2018

The results of the tests conducted on the bitumen sample are as follows:

Sl. No	Description	Test Method as per IS	Test Result	Requirement as per IS:73:2013
1	Penetration at 25 ^{0}C, 1/10 mm	IS :1203 -1978 (RA-2014)	64	60 to 70
2	Softening point, ^{0}C	IS :1205 -1978 (RA-2014)	48	Min. 45
3	Ductility at 27^{0}C, cm	IS :1208 -1978 (RA-2014)	100 >	Min. 50
4	Flash Point, ^{0}C	IS :1209 -1978 (RA-2014)	302	Min. 220

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VIDYARANI P.K.
Technical Manager

AE-13

ನಷ್ಟಕ್ಕೆ ಕಾರಣವಾದ ಅಧಿಕಾರಿಗಳು
ಕೆಟ್ಟಪಟ್ಟ ಬಾವುಗಳು, ಬಾಕಿಯಲ್ಲಿ ಮೆಲಯ
ಬಿಲ್ಲಿನ ಪಾವತಿಯ ಮೊತ್ತವನ್ನು ಪಾವತಿ

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Job No: CTCE/BBMP/KRIDL/W.No.13/BM/AIV/2017-18 11.01.2018

TEST REPORT ON IMPACT VALUE OF AGGREGATES

* Customer	:	**Asst. Executive Engineer,** Shettyhalli Sub Division, BBMP, Bangalore.
* Agency	:	**Technical Manager (West),** KRIDL, Bangalore.
* Name of Work	:	Improvements to Roads and asphalting at pipeline road to Maheshwaramma temple and other roads in Mallasandra Ward No.13 in Shettyhalli Sub Division, BBMP, Bangalore.
* Reference	:	BBMP/EE/DD/WO/145/2017-18 Dated: 21.12.2017
* Sample ID	:	Hot Mix Plant, Bangalore
Technical Reference	:	IS : 2386(Part -4)-1963 (RA-2011)
* Type of Mix	:	Bituminous Macadam
Date of Testing	:	11.01.2018

Sl No.	Details	Trial No. 1	Trial No. 2	Average
1	Total weight of aggregate sample filling the cylindrical measure = W_1 g	387	389	
2	Weight of agregate passing 2.36 mm sieve after the test = W_2 g	82	84	
3	Weight of aggregate retained 2.36 mm sieve after the test = W_3 g	305	305	
4	Aggregate Impact value = percent fines 100* (W2/W1)%	21.19	21.59	21.39

*Information is furnished by the Customer/Representative.

Comments:

→ Maximum allowable Aggregate Impact value for Bituminous Macadam is 30%

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